

Title (en)
STEEL PIPE PILE

Title (de)
STAHLROHRSTAPEL

Title (fr)
PIEU TUBULAIRE EN ACIER

Publication
EP 4101986 A4 20230726 (EN)

Application
EP 21750285 A 20210205

Priority
• JP 2020019449 A 20200207
• JP 2021004344 W 20210205

Abstract (en)
[origin: EP4101986A1] An object is to provide a steel pipe pile having multiple steps of blades and capable of most effectively exerting a supporting force. Another object is to provide a steel pipe pile that has blades with optimum thicknesses and/or fixture strengths and that can be manufactured with reduced costs. An open-end steel pipe pile 1 includes a pile body 3 composed of a steel pipe with an outer diameter of $\phi 800$ mm or less and a plurality steps of blades 5 fixed by welding to the pile body 3 to project from an outer periphery of the pile body 3, and a relationship of $10 \leq h_{\text{sub}k}/w_{\text{sub}k} \leq 30$ (where k is an integer of 1 or more) is satisfied, where k is an integer of 1 or more, $w_{\text{sub}k}$ is a projecting length of a $(k+1)^{\text{th}}$ blade of the plurality steps of blades counted from bottom, and $h_{\text{sub}k}$ is an interval between the $(k+1)^{\text{th}}$ blade and another one of the plurality steps of blades that is downwardly adjacent to the $(k+1)^{\text{th}}$ blade.

IPC 8 full level
E02D 5/28 (2006.01); **E02D 5/56** (2006.01)

CPC (source: EP)
E02D 5/285 (2013.01)

Citation (search report)
• [XY] EP 3121339 A1 20170125 - ASAHI KASEI CONSTRUCTION MAT CORP [JP]
• [IY] US 2015368870 A1 20151224 - LUTENEGGER ALAN [US], et al
• [IY] US 2013101360 A1 20130425 - LUTENEGGER ALAN J [US], et al
• See references of WO 2021157699A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 4101986 A1 20221214; **EP 4101986 A4 20230726**; JP 7272444 B2 20230512; JP WO2021157699 A1 20210812;
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EP 21750285 A 20210205; JP 2021004344 W 20210205; JP 2021541425 A 20210205